

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3	((("6108157") or ("6140784") or ("6567232")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2006/03/13 08:03
L2	9	("6140784").URPN.	USPAT	OR	ON	2006/03/13 08:04
L3	8	(crash near2 stop\$4) and (PES or (position near2 error) or RRO or (repetable near2 runout)) near3 (limit threshold range)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 08:39
L4	10	(crash near2 stop\$4) and (bias\$3 near3 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 08:43
L5	168	(crash near2 stop\$4) and (actuat\$3 near4 bias\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:14
L6	9	("5109310"   "5365389"   "5600516"   "5745325"   "5764436"   "5870264"   "6125017"   "6134086"   "6252745").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 08:53
L8	4079	seagate near2 technologies.as.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:14
L9	6	8 and (usable near2 track)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:15
L11	18	("5109306"   "5550685"   "5585976"   "5646797"   "5760990"   "5886846"   "5920441"   "5923491"   "5995316"   "5999357"   "6005742"   "6097565"   "6141175"   "6236895"   "6310742"   "6449116"   "6611396"   "6707635").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 09:16

## EAST Search History

L12	28	8 and ((crash near2 stop\$4) and threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:37
L13	1848	(record\$3 data usable) near3 (track band) near3 (expan\$4 addition enlarg\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:39
L14	292	(record\$3 data usable) near3 (band) near3 (expan\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:41
L15	1	14 and (crash near3 stop\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:40
L16	11	14 and ((inner outer) near2 diameter)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:40
L17	273	((record\$3 data) near3 (band)) near3 (expan\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:29
L18	22	17 and "360"/\$.ccis.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 09:59
L19	6	("6130796").URPN.	USPAT	OR	ON	2006/03/13 10:02
L20	5	("6239937").URPN.	USPAT	OR	ON	2006/03/13 10:05
L21	5	("5168412"   "5917669"   "6008640"   "6061197"   "6130796").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 10:08
L22	4	("4821125"   "5553086"   "5570244"   "5844742").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 10:08
L24	84	(crash\$1stop\$4 or (crash near2 stop\$4)) and (exceed\$3 near3 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:32

## EAST Search History

L25	0	(crash\$1stop\$4 or (crash near2 stop\$4)) near4 (function based according) near4 (pes or (position near2 error) or rro or (repeatable near2 out))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:32
L26	3	(maximum near2 track) and (band near2 expan\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:44
L27	1	(maximum and default) near3 track near3 (location position\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:45
L28	373	(maximum default) near3 track near3 (location position\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:45
L29	15	28 and (crash near2 stop\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:48
L30	2223	(band near3 expan\$4) and dis\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:49
L31	1	30 and ((inner outer) near2 crash near2 stop)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:50
L32	288	30 and ((inner outer) near2 diameter)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 10:53
L33	2	32 and "360"/\$.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 11:47
L37	1	((((inner outer) near3 diameter) or (crash\$1stop\$4 or (crash near2 stop\$4))) near7 (exceed\$3 near4 bias near3 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 12:38

## EAST Search History

L38	8	("5870237").URPN.	USPAT	OR	ON	2006/03/13 11:52
-----	---	-------------------	-------	----	----	------------------

## EAST Search History

L39	133	("3299581"   "3531788"   "3577133"   "3984873"   "4125883"   "4138741"   "4164763"   "4297737"   "4379316"   "4396960"   "4409629"   "4413251"   "4420830"   "4424543"   "4443874"   "4473153"   "4495533"   "4497003"   "4502136"   "4510592"   "4515272"   "4516177"   "4518904"   "4530018"   "4530019"   "4530020"   "4535374"   "4539614"   "4568988"   "4568994"   "4578723"   "4594622"   "4627288"   "4628379"   "4630190"   "4631606"   "4638383"   "4641294"   "4647997"   "4649531"   "4655348"   "4658308"   "4663682"   "4669004"   "4679102"   "4683506"   "4703371"   "4705279"   "4714967"   "4716480"   "4724501"   "4725907"   "4734813"   "4736358"   "4747002"   "4750059"   "4752848"   "4755981"   "4760477"   "4772972"   "4772974"   "4780866"   "4783705"   "4786995"   "4789975"   "4799112"   "4799209"   "4803580"   "4819103"   "4823212"   "4824059"   "4825310"   "4825321"   "4827364"   "4829501"   "4833665"   "4839756"   "4841517"   "4858034"   "4864443"   "4870703"   "4873679"   "4876618"   "4894734"   "4901173"   "4907214"   "4920437"   "4920462"   "4920528"   "4933785"   "4943748"   "4945311"   "4958839"   "4965684"   "4969059"   "4977472"   "4979055"   "4979056"   "4984100"   "4984230"   "4996617"   "4999720"   "5001700"   "5014142"   "5023736"   "5023737"   "5023857"   "5025335"   "5025336"   "5027241"   "5034837"   "5036416"   "5041924"   "5041926"   "5050016"   "5077218"	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 11:53
3/13/06 1:58:46 PM	C:\Documents and Settings\jmc\My Documents\	EAST\Workspaces\10824861.wsp				Page 5

## EAST Search History

L40	11	("4941154"   "4982297"   "5065382"   "5170299"   "5210660"   "5255131"   "5255136"   "5258933"   "5268800"   "5278703"   "5285330").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 11:53
L41	211	exceed\$ near4 threshold near4 crash	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 12:06
L43	4	exceed\$ near4 threshold same (crash\$1stop\$4 (crash near2 stop\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 12:06
L44	84	exceed\$ near4 threshold and (crash\$1stop\$4 (crash near2 stop\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 12:10
L45	8	velocity near3 exceed\$ near4 threshold and (crash\$1stop\$4 (crash near2 stop\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 12:11
L46	243	((inner outer) near3 (crash near2 stop\$4)) or (crash\$1stop\$4 or (crash near2 stop\$4))) near7 (pes or position or (repeatable near2 run))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 12:40
L47	196	((inner outer) near3 (crash near2 stop\$4)) or (crash\$1stop\$4 or (crash near2 stop\$4))) near5 (pes or position or (repeatable near2 run))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 13:26
L48	158	47 and (threshold range limit)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 12:40
L50	2	((inner outer) near3 (crash near2 stop\$4)) or (crash\$1stop\$4 or (crash near2 stop\$4))) same (PES or (position near2 error)) and ((repeatable near2 run) or rro)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 13:33

## EAST Search History

L51	11	("4188646"   "4764914"   "5012363"   "5121258"   "5570247"   "5661760"   "5668679"   "5771130"   "5784296"   "6212023"   "6304407").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 13:28
L53	3	(position near2 error) near4 (exceed threshold greater) same ((repeatable near2 run) or RRO)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 13:43
L54	12	("4783705"   "5600500"   "6178054"   "6249393"   "6275346"   "6405277"   "6408406"   "6421197"   "6421198"   "6445521"   "6519107"   "6618219").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/13 13:39
L55	49	((position near2 error) or PES) near4 (exceed\$3 threshold greater) same (((repeatable near2 run) or RRO) or (average near3 (error or PES)))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 13:45
L56	1	55 and crash near2 stop	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/13 13:45
S1	12	((("6005725") or ("6480361") or ("6260257") or ("6239937") or ("6091559") or ("6061195") or ("5870237") or ("5596458") or ("5485321") or ("4471396") or ("4435752")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2006/03/10 13:45
S2	1	("6853511").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2006/03/10 13:46
S3	1	("6456213").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2006/03/10 13:46
S4	1	("6822821").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2006/03/10 13:46

## EAST Search History

S5	9	("4812927"   "4841389"   "5168412"   "5539592"   "5880587"   "6008640"   "6046871"   "6094973"   "6600622").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/10 13:52
S6	1	("6853511").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2006/03/10 13:52
S7	5	("5168412"   "5917669"   "6008640"   "6061197"   "6130796").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/10 14:01
S8	5	("6239937").URPN.	USPAT	OR	ON	2006/03/10 14:02
S9	2	(crash near2 stop) and ((bias or (position near2 error)) near2 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/10 15:21
S10	3	(crash near2 stop) and ((bias or (position near2 error) or pes) near2 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/10 15:25
S11	6	(crash near2 stop) and (bias near3 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/10 15:27
S12	248	((crash near2 stop) or park\$3 or unload\$3 or css) near4 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/10 15:40
S13	184	((crash near2 stop) or park\$3 or unload\$3 or css) near3 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/10 15:55
S14	13	((crash near2 stop) or unload\$3 or css) and ((PES or (position near2 error)) near2 threshold)	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/10 16:00
S15	90	(crash near2 stop near2 (location track))	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2006/03/10 16:01